SOUTH FLORIDA WATER MANAGEMENT DISTRICT

South Florida Water Management District

WRAC MEETING AGENDA ADDENDUM

April 3, 2008

Supporting documents for the following item have been added:
Item #:4

See supporting document: Lk O Com Rpt 3 26 08.pdf

SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD)
WATER RESOURCES ADVISORY COMMISSION (WRAC)
LAKE OKEECHOBEE COMMITTEE MEETING
Wednesday, March 26, 2008, Okeechobee Civic Center
1750 U.S. Highway 98 N, Okeechobee, FL 9:00 a.m.

MEETING SUMMARY

AGENDA ITEMS:

- Member Issues
- Total Maximum Daily Loads (TMDL) Update
- Water Conditions Update
- Lake Okeechobee Structures – Emergency Actions Update
- Waterflow South Issues
- Lake Okeechobee Technical Plan and River Watershed Protection Plan Updates
- Lake Ecology Update
- Aquatic Vegetation Management Update

Action - RE: Waterflow South Issues - The Committee had no objection to Mr. Wade communicating to the WRAC, that it appears the brunt of damaging discharges of Lake Okeechobee water during high peakflow seasons are unfairly borne by the Caloosahatchee and St. Lucie estuaries. There is not shared adversity throughout the remaining Everglades ecosystem as there should be. The ultimate solution is to find areas for more water storage throughout the system.

Future Presentations:

- **Lake Okeechobee Service Area Water Availability Rule Development Update**
- **St. Lucie Estuary: Low, Average, and Peak Flows**
- **FDEP Wastewater Residuals Rule Development Update**
- **FDEP presentation on TMDL issues**
- **Aquifer Storage and Recovery (ASR) Status**
- **Lake Istokpoga Watershed**

- **Item 2: Member Issues:**
  - United Waterfowlers opposes the Urban Turf Fertilizer Rule recently adopted by the Florida Department of Agriculture and Consumer Services (DACS) and is working with St. Johns River Water Management District on this issue. The organization is also visiting the Florida Department of Environmental Protection (DEP) to discuss the aquatic vegetation management program. Asked for support from Committee for both issues.
  - DACS Response: Rule is already in effect. Legislature is moving forward with a "Pure Water Act" that would recommend a model ordinance for local government adoption. Could be more stringent

if local governments determine lower rates would be more beneficial to impaired water bodies. More research is needed on nutrient levels in local waters and there were people on the Urban Fertilizer Consumer Task Force who felt the criteria proposed for the rule were not restrictive enough.
    - Ability to do something more restrictive is clearly in the rule.
    - The rule requires Local Governments to consider controlling excess nutrient runoff.
    - Herbert Hoover Dike Status: U.S. Army Corps of Engineers (USACE) is testing results of the first cut off wall. Should see results by March 31 for Reach 1A and by April 30 for Reach 1B. The USACE continues to remove melaleuca when found and will provide an update to WRAC on April 3 about the Tamiami Trail Limited Reevaluation Report. There will be a public meeting about the Tamiami Trail report on April 22.
    - Question about land footprint needed for dike repairs in the Pahokee area? Answer: USACE still working on design but has produced an Environmental Assessment for Reach 1A. An Environmental Impact Statement should be completed by 2009 for the dike repairs.

- **Item 3: Total Maximum Daily Loads (TMDL) Update – Kirk Burns, Office of Counsel, SFWMD:**
    - Kirk Burns summarized status of SFWMD comments to the U.S. Environmental Protection Agency (EPA) about TMDLs proposed for the Everglades Agricultural Area (EAA), the Lake Okeechobee Tributaries and portions of the Everglades.
    - **Discussion**:
    - Member: Appropriate TMDL analyses to cure water body impairment?
    - SFWMD Response: Two-step process to establish TMDLs:
        - Set numeric target which can become the water quality standard;
        - Determine assimilative capacity of the water body (EPA guidance also requires a “Margin of Safety”).
    - Member: Compliance time to achieve TMDL once set?
    - SFWMD Response: much debate about how long it should take to implement a TMDL and after, for the TMDL to achieve non-impairment. E.g. it will take decades to achieve the Lake Okeechobee standard of 40 parts/billion (ppb).
    - Next step – create a Basin Management Action Plan – sets the timeframe and tools for reaching the TMDL; e.g. permitting, Best Management Practices (BMPs), Stormwater Treatment Areas (STAs).

- For the Northern Everglades and Estuary Protection Program (state law), the Lake Okeechobee Protection Plan will be considered the "BMAP" for the lake once it is approved.
- Member: Need to determine correct background level given scientific literature indicating lake has been naturally eutrophic for a long time.
- Member: Water from the north received by agricultural areas north of the lake is dirtier than when discharged by citrus growers, yet they get no credit for this cleanup.
- SFWMD response: The Basin Management Action Plan should address this. DEP guidance calls for a "leveling of the playing field" to recognize progress made by farmers that implemented BMPs early on.
- Chair: "Rebuttable Presumption": If landowner is implementing "Best Management Practices" according to existing plan designed to achieve water quality goals, presumed to be in compliance; but can be rebutted through review of water quality monitoring data.
- "Concentration" vs. "Load"? Response: Can convert TMDL (Load) to Concentration.
- Member: Mismatch between Tributary TMDLs and Lake Okeechobee TMDL.
- Chair: Cities: regulated by EPA under different section of Clean Water Act.
- How the 10 parts/billion standard fits in.
- Assimilative Capacity – diminishes over time. Problem of legacy phosphorous in Lake Okeechobee watershed. Need better methods and better information.
- DEP requested opportunity to do presentation as follow up.

- **Item 4: Water Conditions Update, Cal Neidrauer, SFWMD:**
  - Mr. Neidrauer indicated all basins in district except Southwest, are doing better in March. Lake now predicted to be between 8 and 11' by end of the dry season (vs. about 7').
  - **Discussion:** Questions about average La Niña dry season rainfall and lake level. Response: last year, during an El Niño year, lake was at 9.5' at end of dry season.

- **Item 5: Lake Okeechobee Structures Emergency Actions: Joe Albers, Operations and Maintenance, SFWMD:**
  - Mr. Albers provided update on repairs and modifications to water control structures.
  - **Discussion**:
  - Temporary pumps would be available by end of Summer this year.
  - Velocities over navigational notches? Ans: Don't know yet. Will do flow tests once structural work is completed.
  - Will need to provide Notice to Navigation and Boating interests.

- Access during and after construction – ramp on east side of river will not be shut down.
- Don't know how long boat barricade downstream of S65-E will need to remain in place. Studies will determine answers.

- **Item 6: Waterflow South Issues – Cal Neidrauer, SFWMD:**
  - Chair: Presentation responds to questions from members about how much Lake Okeechobee water could be routed to the south during peak flow years if all legal and regulatory constraints were lifted? Cal was asked to present whatever information responded to the questions. Kim Taplin, USACE helped out and will help answer questions.
  - SFWMD Staff: Presentation responds to member questions and comments, is not part of any ongoing study, but includes model simulation to show what happens if regulatory constraints are relaxed. Only looks at current system, not planned future storage and conveyance improvements.
  - Presentation is comprehensive and is posted on WRAC – Lake Okeechobee Committee web site for future reference.
  - Results of modeling analysis show the current system has the hydraulic capacity to discharge more excess water from Lake Okeechobee to the WCAs, but cannot do so due potential impacts to water quality in the Everglades Protection Area (EPA), Everglades WCA hydrology & ecology, and endangered species in the WCAs and ENP.
  - Results show if regulatory/operational and legal constraints were relaxed, the current system has the physical capability of discharging 8 times more water to the WCAs, but would reduce discharges to the estuaries by only about one-half. During wet years there would still be damaging discharges to the estuaries.
  - **Discussion included:**
  - Member: At build out of CERP, appears estuaries will still get damaging high flows.
  - USACE Staff: CERP Decompartmentalization Project not intended to change pump and canal capacity limitations.
  - Member: St. Lucie and Caloosahatchee estuaries don't have legal protections that are wrapped around the Central and Southern Everglades.
  - Response: High discharges in peak flow years are 10% of the problems analyzed by CERP. Not fully resolved because volumes in peak flow years are so high. Aquifer Storage and Recovery (ASR) was a key component of the CERP, and was intended to handle a great deal of peak flow.
  - Need to look at planned results of:
    - Northern Everglades and St. Lucie/Caloosahatchee River Watershed Protection Plans

- CERP and related projects.
- Water Conservation Area Decompartmentalization
- Modified Water Deliveries to Everglades National Park (Mod Waters).
- EAA Reservoirs Phases 1 and 2
- Herbert Hoover Dike Repairs

Mod waters flow amounts in current plan are much less than previously intended.

- USACE Staff: Completing Mod Waters is a first step. Still limited because of seepage barrier. Cannot by law adversely impact flood control or water supply.
- Member: If no historic connection from Lake to east or west, then CERP target should have been zero years for peak flow discharges to east or west.
- Response: ASR was seen as best cost alternative to handle peak flow discharges.
- Member: Endangered species on lake not protected as well as in Everglades.
- USFWS Response: Will research the issue and have response at next meeting.
- Member: Projects are moving and storing more water so eases pain some. Lake still gets too deep and too shallow. Need more storage in system. Need to work upstream and downstream.
- USACE Staff: Key is not only storage but also timing.
- Members: Concerns about Everglades kite and other endangered and threatened species.
- Members/Staff: Discussion about NEPA requirements; baseline data for species, etc.
- Discussed amount of water reuse on Lower East Coast.
- Discussed purpose, intent and operations of Water Conservation Areas.
- Discussed surface water storage areas, evapo-transpiration rates, need to maintain water levels in the Stormwater Treatment Areas and role of ASR.
- Comment that USACE "Plan 6" could provide much more conveyance.
- USACE staff: Schedule for review of "flow way South" has been pushed back some.
- Discussed impact of new development and importance of revised Environmental Resource Permit requirements.

- **<u>Item 7: Lake Okeechobee Technical Plan, Phase II Update – Temperince Morgan, SFWMD:</u>**
  - Beginning "Hybrid Wetlands Treatment Technology" and "Chemical Treatment Pilot" studies.

- Starting Fisheating Creek Sub-Basin Study. TMDL for Fisheating Creek to be completed by 2015. Will have one year for public comment and input.
- Plan Updates required in 2010; will do interim reports as needed.

- **Caloosahatchee River Watershed Protection Plan Update: Janet Starnes, SFWMD:**
  - Working to ensure Caloosahatchee Watershed Plan is consistent with work being done on Caloosahatchee TMDL.
  - Intend to have draft plan to WRAC and Governing Board in September.
  - Lee County pleased with progress on plan.
  - Performance indicators: using "WSE" Regulation Schedule for Lake Okeechobee or new schedule?
  - SFWMD Response: we're looking at how to deal with that issue.
  - Member comment: New schedule (LORS) provides more reliable base flow to Caloosahatchee.
  - USACE: What is irrigation demand number used for the "future base condition"? Response: Land use from C-43 Basin Project Implementation Report.
  - Planning horizon is 2015. Discussed performance measure information from the 2 by 2 model. Using the Regional Systems Model for this planning effort.

- **St. Lucie River Watershed Protecton Plan Update: Mike Voitch, SFWMD:**
  - Similar presentation – no questions.

- **Item 8: Lake Ecology Update, Dave Unsell, SFWMD:**
  - Nearshore total Phosphorous levels are up slightly in the lake due to recent high winds (stirs up sediment in open water areas of lake).
  - Discussed internal channels in Lake Istokpoga and need for maintenance dredging in that lake.
  - Discussed amount of submerged aquatic vegetation (SAV) in Lake Istokpoga. Hydrilla is better than nothing so need to leave some hydrilla.

- **Item 9: Aquatic Vegetation Management Update – Mike Bodle, SFWMD:**
  - **Discussion:**
  - Member: Support most of spraying program to control cattails, torpedo grass, melaleuca and water lettuce.
  - SFWMD: Getting good response of small seedlings (torpedo grass) in the newly dry marshes with All Terrain Vehicles. : being

used because of low water levels. Able to get better, more precise control of small seedlings than by air.
    - Discussed hydrilla control on Upper Chain of Lakes. Need to help educate people that controlling a small area helps avoid need to control larger areas. The larger the area controlled, more serious problems from result from breakdown of detritus.
    - Discussed benefit of return of native SAV when hydrilla controlled (e.g. tape grass and pond weed).
    - Need to inform fishermen on Lake Okeechobee of the benefits of torpedo grass control.

- **Next Meeting:** Wednesday, April 30, Clewiston – meeting place TBA.